

Appl No. 10/021,430  
Amdt dated September 1, 2005  
Reply to Office action of June 1, 2005

**Amendments to the Drawings:**

The original drawings submitted in this application were objected to by the Examiner because the specification addresses 'an exemplary wireless network 10' but no reference 10 was shown on Fig. 1. Included with this response is a replacement drawing sheet showing reference numeral 10 in Fig. 1 and an annotated drawing sheet showing the change to Fig. 1.

Attachment: Replacement Sheet  
Annotated Sheet Showing Changes

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# **REMARKS/ARGUMENTS**

The Applicant would like to acknowledge, with thanks, the Office Action mailed June 1, 2005. This amendment and response is responsive to the Office Action mailed June 1, 2005. Claims 1-18 were pending and stand rejected. Claims 1, 3, 5, 7-10, 14 and 16-17 were amended and claims 2, 4, 11, 15 were cancelled. Claims 19-22 were added. The claim element that the access point receives data identifying the appropriate VLAN for the wireless station and access a table to determine the appropriate broadcast key is not new matter as it is described on page 12, lines 5-9 of the original specification. The claim element that the access point receives a session key from the authentication server is not new matter as it is described on page 12, lines 1-4 of the original specification. The claim element that the broadcast key is encrypted with the session key is not new matter as it is described on page 12, lines 7-9 of the original specification. Claim 3 was amended responsive to the examiner objecting to the article 'a' preceding the word 'using.' The article 'a' has been deleted.

## **I. REJECTIONS UNDER 35 U.S.C. § 102**

Claims 1-4, 6, 8, 10-13, 15 and 17 stand rejected as being anticipated by U.S. Patent No. 6,307,837 to Ichikawa et al. (hereinafter Ichikawa). Withdrawal of this rejection is requested for the reasons that will now be set forth.

Independent claims 1, 10 and 21 as they currently stand recite a method (or an access point configured to implement the method) for servicing a VLAN by storing a table associating a broadcast key with a VLAN. The method further recites receiving a request for access to a network from a wireless station. The wireless station is authenticated by an authentication server. The access point receives data from the authentication server with a VLAN identifier for the wireless station. The access point accesses the table to determine the appropriate broadcast key for the VLAN identifier and transmits the appropriate broadcast key to the wireless station. Thus, the wireless station gets a new broadcast key at each access point.

By contrast, Ichikawa stores the VLAN information table with VLAN-ID and VLAN-Keys at the authentication server 7-8 (col. 11, line 65 – col. 12, line 15), not at the access point (the functional equivalent of which in Ichikawa is the wireless base station 7-6). The encryption key is shared by all terminals having the same VLAN-ID (*Id.*), whereas an aspect of the present

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invention as defined in claims 1, 10 and 20 is that the broadcast keys are stored at the access point, not at the authentication server, which can enhance security by storing different broadcast keys for the same VLAN at each access point. Thus, if a broadcast key is compromised at one access point, the VLAN is still secure at the remaining access points. Therefore, claims 1, 10 and 21 are not anticipated by Ichikawa.

Claims 3, 5, 6-9 and 19 directly depend from claim 1 and therefore contain each and every element of claim 1. Therefore, for the reasons already set forth for claim 1, claims 3, 5, 6-9 and 19 are not anticipated by Ichikawa.

Claims 12, 14, 16-18 and 20 directly depend from claim 10 and therefore contain each and every element of claim 10. Therefore, for the reasons already set forth for claim 10, claims 12, 14, 16-18 and 20 are not anticipated by Ichikawa.

Claim 22 directly depends from claim 21 and therefore contains each and every element of claim 21. Therefore, for the reasons already set forth for claim 21, claim 22 is not anticipated by Ichikawa.

## **II. REJECTIONS UNDER 35 U.S.C. § 103**

Claims 5 and 14 stand rejected as being obvious based on the combination of Ichikawa and U.S. Pub. No. 2001/0014088 to Johnson et al. (hereinafter Johnson). Claims 7, 9, 16 and 18 stand rejected as being obvious based on the combination of Ichikawa and U.S. Pub. No. 2003/0041266 to Ke et al. (hereinafter Ke). Withdrawal of these rejections is now requested for the reasons that will now be set forth.

The aforementioned defect in Ichikawa is not remedied by any teaching of either Johnson or Ke. Johnson makes no mention of VLANs. Furthermore, the examiner cites Johnson for teaching the wireless LAN operates in accordance with the IEEE 802.11 standard, which does not remedy the aforementioned defect of Ichikawa. The only mention in Ke about VLANs is that VLANs can be connected to a switch via dedicated communication links (see for example paragraphs 13 & 14). Furthermore, the examiner recites Ke for teaching the step of tagging data to which subnet it belongs, which does not remedy the aforementioned defect in Ichikawa. Therefore, neither Ichikawa, Johnson nor Ke, alone or in any combination thereof, teach, suggest or motivate all of the elements of independent claims 1, 10 and 21.

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Claims 3, 5, 6-9 and 19 directly depend from claim 1 and therefore contain each and every element of claim 1. Therefore, for the reasons already set forth for claim 1, claims 3, 5, 6-9 and 19 are not anticipated by Ichikawa.

Claims 12, 14, 16-18 and 20 directly depend from claim 10 and therefore contain each and every element of claim 10. Therefore, for the reasons already set forth for claim 10, claims 12, 14, 16-18 and 20 are not anticipated by Ichikawa.

Claim 22 directly depends from claim 21 and therefore contains each and every element of claim 21. Therefore, for the reasons already set forth for claim 21, claim 22 is not anticipated by Ichikawa.


Furthermore, claim 19-20 and 22 further recites that the broadcast key is sent to the wireless station encrypted by the wireless station's session key. Nothing in Ichikawa, Johnson nor Ke teaches, suggests or motivates this element. Therefore, in addition to the reasons already set forth, claims 19-20 and 22 are neither anticipated nor obvious in view of Ichikawa, Johnson and Ke alone or in any combination thereof.

### III. Conclusion

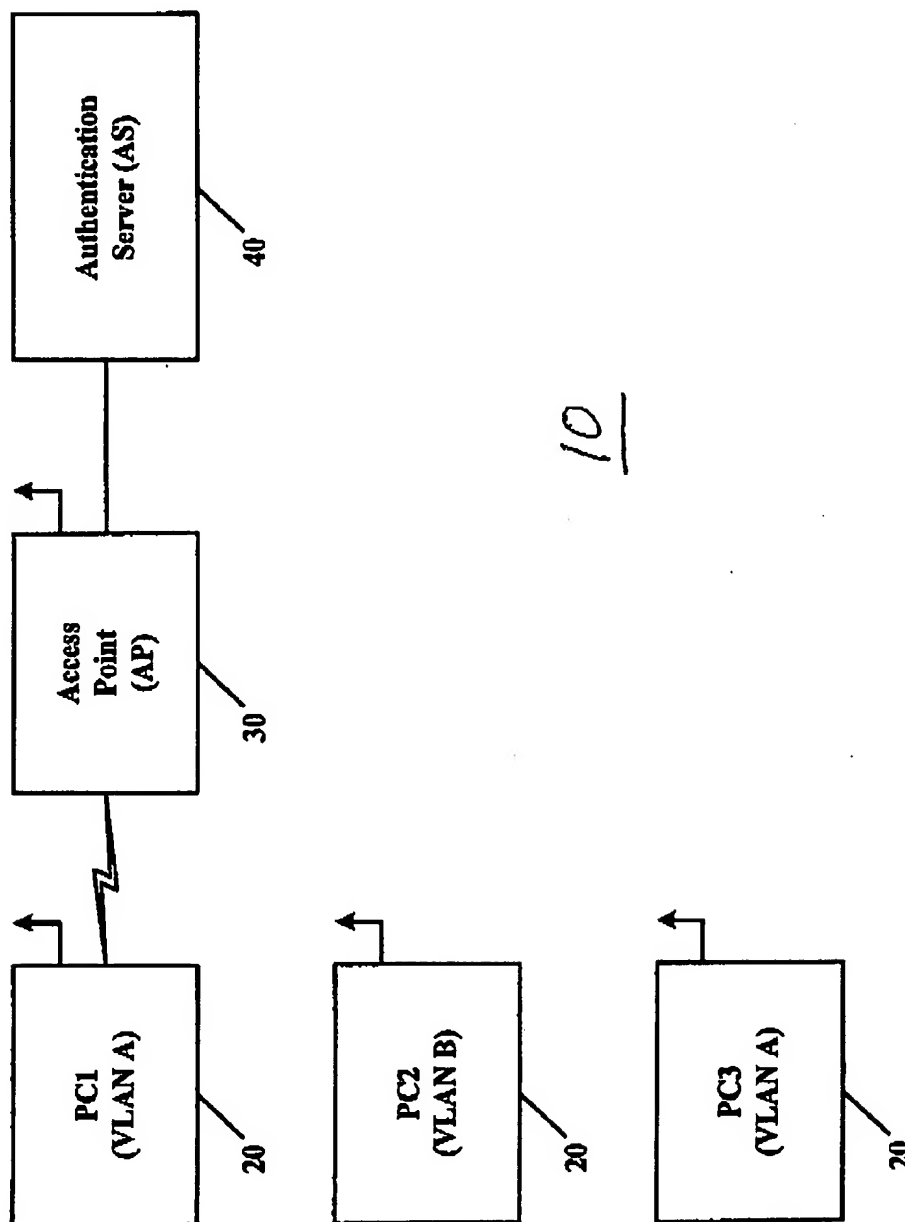
For the reasons just set forth, Applicant requests withdrawal of the rejections. If there are any fees necessitated by the foregoing communication, please charge such fees to our Deposit Account No. 50-0902, referencing our Docket No. 72255-13066.

Respectfully submitted,  
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Date: 1-Sep-05

  
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Application No.: 10/021,450  
Filing date: December 13, 2001  
Docket No.: 72255/13066  
ANNOTATED MARKED-UP DRAWINGS



**Fig. 1**